

BAB VI

KESIMPULAN DAN SARAN

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6.1. KESIMPULAN

1. Perlakuan konsentrasi Na-alginat, lama penyimpanan dan interaksi antara kedua faktor perlakuan tersebut berpengaruh nyata terhadap viabilitas sel *L. plantarum* FNCC 213 terimobil dalam sari buah nanas probiotik.
2. Perlakuan konsentrasi Na-alginat dan lama penyimpanan berpengaruh nyata terhadap jumlah sel bebas yang terdapat dalam cairan sari buah nanas probiotik, tetapi tidak ada interaksi antara kedua faktor tersebut.
3. Semakin tinggi konsentrasi Na-alginat, maka penurunan viabilitas sel terimobil selama penyimpanan semakin kecil. Semakin lama penyimpanan (28 hari) sari buah nanas probiotik, maka penurunan viabilitas sel terimobil yang paling kecil adalah perlakuan Na-alginat 8% (turun < 1 siklus log).
4. Semakin rendah konsentrasi Na-alginat dan semakin lama penyimpanan, maka jumlah sel yang lolos atau keluar dari *beads* dan terhitung sebagai sel bebas semakin meningkat.
5. Jumlah sel hidup di dalam *beads* sampai akhir masa simpan (28 hari) pada semua perlakuan konsentrasi Na-alginat adalah berkisar antara $2,0 \cdot 10^{11}$ – $7,1 \cdot 10^{13}$ cfu/gram *beads*.

6.2. SARAN

Perlu dilakukan penelitian lebih lanjut untuk perlakuan *coating beads* alginat sehingga dapat meningkatkan viabilitas sel *L. plantarum* FNCC 213 terimobil dalam sari buah nanas probiotik.

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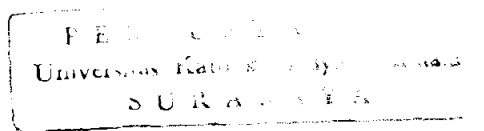
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